

# NICHOLAS FREEMAN MEHRLE

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## EDUCATION

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**Johns Hopkins University** **Baltimore, MD**  
M.A. Physics and Astronomy May 2016  
– **GPA:** 4.0/4.0  
  
B.S. Physics May 2016  
– **Additional Majors:** Mathematics & Applied Mathematics and Statistics  
– **GPA:** 3.91/4.0

## RESEARCH

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**Cosmology Large Angular Scale Surveyor** **Baltimore, MD**  
Research Assistant - Department of Physics and Astronomy May 2013 - May 2016  
– Design of variable-delay polarization modulator  
  
**CERN** **Geneva, Switzerland**  
Research Assistant - CMS Experiment Jan - May 2015  
– Statistical analysis to discriminate production methods of Higgs boson

## EMPLOYMENT

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**Johns Hopkins University** **Baltimore, MD**  
Teaching Assistant - Department of Mathematics Sept - Dec 2015  
– Differential Equations  
  
**Optiver US LLC** **Chicago, IL**  
Trading Intern June - Aug 2015  
– Simulated high frequency trading of financial options  
  
**Johns Hopkins University Applied Physics Lab** **Laurel, MD**  
Technical Intern - Applied Concepts and Technology Group May - Aug 2014  
– Algorithm development, modeling and simulation  
  
**Johns Hopkins University** **Baltimore, MD**  
Tutor - Learning Den Sept 2013 - May 2014  
– Newtonian mechanics and electricity and magnetism

## PUBLICATIONS

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- *CLASS: The Cosmology Large Angular Scale Surveyor*. With Thomas Essinger-Hileman et al. arXiv reference: 1408.4788.
- *The Cosmology Large Angular Scale Surveyor (CLASS): 38 GHz detector array of bolometric polarimeters*. With John W. Appel et al. arXiv reference: 1408.4789.

## MISCELLANEOUS

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**Programming:** Python, Java, JavaScript, C, C++, Matlab, Mathematica, R, HTML  
CSS, L<sup>A</sup>T<sub>E</sub>X, VBA  
**Organizations:** Phi Beta Kappa, Sigma Pi Sigma, Wading Team  
**Testing:** Physics GRE - 960/990 (91st percentile)